The opinion in support of the decision being entered today was <u>not</u> written for publication and is <u>not</u> binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

AUG 2 4 2004

PAT. & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte LARRY M. CIRJAK, MICHAEL F. LEMANSKI,
DAVID R. WAGNER, NANCY C. BENKALOWYCZ, PATRICIA R. BLUM,
MARC A. PEPERA, and CHRISTOS PAPARIZOS

Appeal No. 1999-1310 Application No. 08/703,805

ON BRIEF

Before KIMLIN, GARRIS, and WARREN, <u>Administrative Patent Judges</u>.

GARRIS, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 2-20. These are all of the claims remaining in the application.

The subject matter on appeal relates to a process for manufacturing vinyl acetate in a fluid bed reactor wherein the improvement comprises feeding ethylene and acetic acid into the

fluid bed reactor through one or more inlets and feeding an oxygen-containing gas stream into the fluid bed reactor through at least one further inlet. Further details of this appealed subject matter are set forth in representative independent claim 16 which reads as follows:

16. The process for manufacturing vinyl acetate in a fluid bed reactor in which an oxygen-containing gas, ethylene and acetic acid are reacted in the presence of a fluid bed catalyst material to produce vinyl acetate, wherein the improvement comprises feeding ethylene and acetic acid into said fluid bed reactor through one or more inlets, feeding an oxygen-containing gas stream into said fluid bed reactor through at least one further inlet provided that each of the streams fed to the reactor is outside its flammability limits, co-joining the oxygen-containing gas, ethylene and acetic acid while in contact with said fluid bed catalyst material in said fluid bed reactor to enable the ethylene, acetic acid and oxygen to react to produce vinyl acetate and recovering said vinyl acetate from said fluid bed reactor.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Calcagno e	t al. (Calcagno)		3,714,237	Jan.	30,	1973
Sennewald (GB)	et al.	(Sennewald	` 623)	1 266 623	Mar.	15,	1972
Sennewald (GB)	et al.	(Sennewald	` 624)	1 266 624	Mar.	15,	1972

Claims 2-7 and 12-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Sennewald '623 and Sennewald '624 optionally in view of Calcagno.

Claims 2-16 are rejected under 35 U.S.C. § 101 as claiming the same invention as claimed in application Serial No. 08/703,824 (which is a continuation of application Serial No. 08/375,762) which now has matured into Patent No. 5,710,318.

As indicated on page 3 of the brief and clarified on page 3 of the answer, dependent claims 13 and 17-20 have been grouped and argued separately from the other claims which have been rejected under 35 U.S.C. § 103. It follows that we will individually consider these separately grouped and argued claims in assessing the section 103 rejection before us. However, as correctly indicated by the examiner on page 3 of the answer and not contested by the appellants, claims 2-16 will stand or fall together with respect to the rejection under 35 U.S.C. § 101.

We refer to the brief and to the answer for a complete exposition of the contrary viewpoints expressed by the appellants and by the examiner concerning the above noted rejections.

OPINION

For the reasons set forth in the answer and below, we will sustain each of the rejections before us on this appeal.

We agree with the examiner that it would have been obvious for one with ordinary skill in the art to feed oxygen into the fluid bed reactor of the Sennewald references separately from the

ethylene and acetic acid reactants. This is because the ultimately desired result of all three reactants being present in the reactor would be achieved regardless of whether the oxygen is fed separately from or together with the ethylene and acetic acid reactants. Moreover, this obviousness conclusion is reinforced by the Calcagno reference which expressly teaches feeding the reactants including oxygen separately or together in a vinyl acetate manufacturing process (e.g., see lines 3-9 in column 2).

The appellants argue that feeding oxygen separately as here claimed would not have been obvious because it is contrary to the common approach in the prior art and because it has several "unobvious" advantages associated with the capability of using higher oxygen concentrations than safely attainable if all reactants were fed as a mixture into the reactor. These arguments, even if supported by evidence (which they are not), cannot be regarded as persuasive. As properly indicated by the examiner in his answer, none of the separately grouped and argued claims under consideration in this rejection contain limitations concerning features such as the aforementioned higher oxygen concentrations of the type focused upon by the appellants' arguments.

We are also unpersuaded by the appellants' argument that Calcagno does not support the previously discussed conclusion of obviousness simply because patentee's vinyl acetate manufacturing process involves a liquid phase. Regardless of whether a liquid versus gas phase is involved, the Calcagno reference nevertheless evinces that it was known in the prior art to feed reactants including oxygen separately or in admixture. Plainly, such evidence supports the conclusion that it would have been obvious to separately feed the oxygen reactant in the vinyl acetate manufacturing process of the Sennewald references.

As for the appellants' arguments concerning the dependent claims directed to recovering and recycling catalyst, these arguments are unconvincing for the reasons expressed in the answer. Indeed, we note that the appellants have not even contested with any reasonable specificity the examiner's reasons for considering these claim requirements satisified by the Sennewald references (i.e., see the paragraph bridging pages 7 and 8 of the answer). Similarly, notwithstanding the appellants' unembellished assertion to the contrary, we perceive merit in the examiner's position (see the last two pargraphs on page 8 of the answer) that the Sennewald references teach or at least would have suggested adding promotor (i.e., activator) to the Sennewald

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reactor directly or via a recycled catalyst as required by dependent claims 18-20. We consider the examiner's reasoning in support of his position to be well taken particularly since, again, the appellants have not contested this reasoning with any meaningful specificity.

In light of the foregoing and for the reasons expressed in the answer, we will sustain the examiner's section 103 rejection of claims 2-7 and 12-20 as being unpatentable over Sennewald '623 and Sennewald '624 optionally in view of Calcagno.

With respect to the section 101 rejection based on double patenting of the same invention type, the appellants (citing the test of In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970)) argue that "the practice of the process of the instant application does not necessarily infringe the claims of file wrapper continuation application 08/703,805 [now Patent No. 5,710,318] because one does not necessarily have to feed the ethylene and acetic acid into the reactor as a mixture [i.e., as recited in claim 1 of the patent]" (brief, page 9). In response, the examiner has pointed out that appealed dependent claim 2 expressly recites feeding the ethylene and acetic acid into the reactor as a gaseous mixture. Once again, the appellants have not advanced on the record before us any reasonably specific

disagreement with the examiner's rationale. Thus, it is undisputed on the record of this appeal that at least one of the appealed claims under consideration in the section 101 rejection would necessarily be infringed by practice of (and thus is drawn to the same invention as) claim 1 of the applicants' Patent No. 5,710,318. For this reason and because the here rejected claims will stand or fall together as previously indicated, we will sustain the examiner's section 101 rejection of claims 2-16 based on double patenting of the same invention type over the claims of Patent No. 5,710,318.

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

<u>AFFIRMED</u>

Edward C. Kimlin

Administrative Patent Judge

Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

Administrative Patent Judge

BRG:tdl

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